



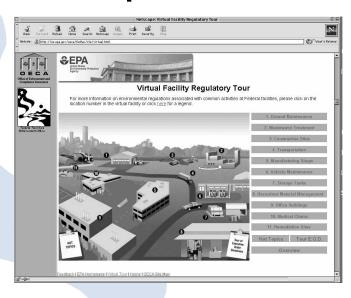
an environmental bulletin for federal facilities

# Federal Facilities Compliance Assistance Center Opens on the Web

PA has launched the Federal Facilities Compliance Assistance Center, an Internet-based resource aimed at helping federal agencies comply with environmental laws and regulations. Sponsored by FFEO, the new center is called FedSite and is the tenth compliance assistance center opened by EPA.

FedSite links the user with a wealth of information. A "virtual tour" of a fictitious

facility walks the user through compliance issues typically found at federal facilities, including air emissions, water discharges, and hazardous waste man-



# Inside

- 2 SFI Project Expands to Include Federal Facilities
- 3 New Executive Orders Signed
- 4 Reports and Policies: Final Audit Policy Issued, RCRA Administrative Orders, Compliance Analyses of NPDES Violations
- 6 News
- 7 EMR News
- 8 The Hammer
- 10 Partnerships
- 11 Conference Update
- 12 Publications
- 14 VP Highlights Green Achievements
- 15 Upcoming Events, Success Story

agements. Links to federal agencies, state compliance programs, other compliance assistance centers, training resources, demonstrations, and publications make FedSite the "first stop" for federal facility compliance information. Visit FedSite at www.epa.gov/oeca/fedfac/cfa.

FedSite serves a number of functions: (1) it provides a centralized resource tool of environmental compliance information for federal facilities; (2) it creates tools, tours, and guides that assist federal agencies in attaining compliance with environmental requirements; (3) it makes environmental regulations easier to understand for federal agencies; and (4) it helps federal agencies be environmentally responsible and model leadership and stewardship to private and public sectors.

Visit FedSite and other compliance assistance centers at www.assistance centers.net. For more information, contact Marie Muller at (202) 564-3658 or Gregory Snyder at (202) 564-4271.

# Director's Word: Craig Hooks

The goal of the Federal Facilities Enforcement Office (FFEO) is to ensure that the federal government attains a level of compliance with this country's environmental laws that surpasses the rest of the regulated community. In this issue of *Fed-Facs*, I would like to address FFEO's current approach to a successful federal facilities enforcement and compliance program and outline three priorities for improving our own effectiveness.

Over the past several years, the Federal Facilities Enforcement and Compliance Program has undergone significant changes with the advent of new and clarified enforcement authorities for federal facilities under SDWA, CAA, UST, and TSCA. Coupled with our historic ability to assess penalties under RCRA and stipulated penalties under CERCLA, these authorities will help us promote a strong enforcement program at federal facilities.

Much of what FFEO does is either statutorily required or mandated by Executive Order. We will continue to fulfill those responsibilities, in addition to implementing new techniques to help federal facilities attain environmental compliance. With the continued reduction of EPA's enforcement budget, we at FFEO must work with less, but we must also look strategically at how resources can be used most effectively to achieve the largest environmental and public health benefits. As an organization we must strive to answer the question, "what environmental benefits do our efforts produce?" and target our activities accordingly.

FFEO has identified three main goals for FY 2000: (1) improving data manage-

Continued on page 5

# EPA's Sector Facility Indexing Project Expands to Include Some Federal Facilities

n response to widespread stakeholder interest, EPA is expanding the Sector Facility Indexing Project (SFIP) to include a subset of federal facilities. This expansion will mean that communities can obtain important compliance and inspection information about local federal facilities, and facilities themselves will be encouraged to become more accountable.

SFIP is a computerized database of environmental information that currently includes approximately 640 facilities in 5 sectors. The sectors currently covered are: automobile assembly; pulp manufacturing; iron and steel production; petroleum refining; and primary smelting and refining of aluminum, copper, lead, and zinc (nonferrous metals). SFIP collects in one location the information that facilities must provide under a number of federal environmental statutes, including infor-

mation on past inspections and enforcement actions, the size of the facilities and their annual releases of chemicals into the environment, and demographic data about communities near the facilities. SFIP has been publicly available since May 1998 and is accessible at www.epa.gov/oeca/sfi.

Since EPA has chosen to expand SFIP to federal facilities, the Agency is now working to determine a subset of the federal facility universe that is manageable and provides useful information. Factors that are taken into consideration when considering an expansion include: (1) whether the proposed sector is a current EPA priority; (2) the size of the sector and the ability to subdivide it; (3) the ability to define the sector universe and capture both large and small facilities; (4) the feasibility of obtaining permit and facility

information for the sector; (5) the availability of outside information; and (6) the interest of the various stakeholders. EPA's goal is to have the expansion to federal facilities completed later this year. As SFIP expands, a primary concern is maintaining public confidence in the integrity of the data (see box below). Regions, states, and affected facilities will be given the opportunity to review the data and resolve any data quality issues through a coordinated EPA/state effort prior to release

Additional information on SFIP can be obtained by logging on to the project's website at www.epa.gov/oeca/sfi. For more information, please contact Greg Snyder, FFEO, at (202) 564-4271 (snyder.greg@epa.gov) or Rob Lischinsky, Office of Compliance, at (202) 564-2628 (lischinsky.robert@epa.gov).

#### **HOW SFIP ENSURES DATA QUALITY**

SFIP is a prototype for both integrating data from different media programs and improving data quality, as well as conducting multimedia analysis to identify industry trends and track success over time. The project has multiple uses. Facilities can benchmark their data against other similar facilities, or simply monitor their own regulatory performance. The database gives environmental and community groups easier access to information they can use to learn about the environmental performance of individual facilities. Government agencies can use the information when planning how to allocate scarce resources.

Prior to the initial release of SFIP, EPA stakeholders, including industry, environmental groups, and community organizations, commented on the project. EPA worked with stakeholders to establish complete definitions for each of the data elements along with appropriate caveats so as to minimize the potential for misinterpretation of the data. Each facility included within SFIP received a copy of its compliance and enforcement data and was given the opportunity to submit comments. State agencies also received the information for review, since a large portion of the data is provided to EPA by state governments. Each comment was tracked to resolution both to ensure that all necessary data corrections were made and to obtain an overall view of data quality. Following the data reviews, a study showed that the data integrated by SFIP was of high quality, with the data that was commented on by the facilities having a baseline accuracy of 96%. Since the project's release, EPA has attempted to "refresh" or update the data quarterly and no significant comments on data quality have been made. Therefore, EPA continues to have confidence in the data.

Users of SFIP may submit comments electronically via the website's

comment page; by calling the project's telephone hotline; or by writing to EPA. Comments can be submitted on any aspect of the project and general comments regarding the project are reviewed and acted upon as appropriate. SFIP facilities may also submit comments concerning the accuracy of their own data.

When EPA launched the SFIP website, the Agency committed to monitor and evaluate the progress of the project. Specifically, EPA wanted to look at SFIP's success in providing greater public access to accurate compliance and facility-level information, as well as improving multimedia facility profiling and sector-based analysis. A formal evaluation was carried out with EPA obtaining input from user groups both inside and outside the Agency, including the EPA regions, the states, industry, environmental groups, and trade associations. The results were positive. Extensively used, SFIP has enhanced public access to and knowledge of facilities' environmental performance. The project is cited for improving multimedia facility profiling; providing useful data in a "user-friendly" website; improving data quality in underlying databases; and serving as an incentive to achieve and maintain compliance. Furthermore, the results have shown that the public does understand the data; the data have been structured in such a way as to minimize any potential misinterpretation; and the explanatory and background information provided allows users to understand the data in context.

The evaluation also identified widespread interest in an expansion of SFIP that would build upon its success and make the project an even more valuable analytical tool.

# **New Executive Orders Signed on Earth Day 2000**

President Clinton signed a new Executive Order on April 22, 2000, aimed at "Greening the Government Through Leadership in Environmental Management." Executive Order 13148 is intended to build on the successes of Executive Order 12856 and other recent orders, and to move the federal government into a position of leadership in environmental stewardship.

"Our Administration's series of 'Greening the Government' Executive Orders illustrates how the federal government can operate cleaner while spending less," noted Vice President Gore. "This new Executive Order will mean cleaner communities and safer places to live, particularly for our children." (See related article on page 14.)

The new Executive Order calls for federal agencies to meet a voluntary goal of a 40 percent reduction in releases and offsite transfers of toxic pollutants over the next four years, from a baseline year of 2001, based on current federal release data. This would amount to about 3 million pounds of toxic chemicals not released into the environment. The reduction goals called for by E.O. 12856 were achieved three years early. By 1997, federal agencies reported a 58 percent drop in releases to the environment, compared to releases reported in 1994. (Results for 1998 and 1999 are not available yet.) The

# **FedFacs**

is published by EPA's Federal Facilities Enforcement Office.

Joyce Johnson, FFEO, Editor Gilah Langner, Stretton Associates, Inc., Writer Robin Foster, SciComm, Inc., Layout

To receive *FedFacs* in the mail, contact:

Federal Facilities Enforcement Office U. S. EPA (2261A), 401 M Street SW, Washington, DC 20460

or Fax: 202-501-0069

#### Read FedFacs on the Internet:

http://www.epa.gov/oeca/fedfac/ann/index.html

new baseline will reflect the doubling of the number of chemicals covered by the Toxics Release Inventory since 1993 as well as changes to certain chemical specific reporting thresholds.

The new Executive Order requires every federal agency over the next two years to determine if a pharmacy program is feasible to adopt, and if so, to put it in place as a way of tracking, distributing, and managing toxic and hazardous materials. The pharmacy system was instituted by certain federal facilities under E.O. 12856 — particularly those with "industrial" processes such as aircraft or ship repair and maintenance as a way of actively managing supplies of hazardous materials. The system resulted in fewer materials exceeding their shelf life and having to be disposed of as hazardous waste. For example, between 1997 and 1998 at Fort Carson in Colorado, the hazardous material control center was responsible for over 125 changes that reduced the amount of hazardous materials and toxic chemicals entering the waste stream by 70 percent. The pharmacies also brought facilities increased efficiency in line processes, lower costs, a cleaner environment, and a safer workplace.

In another step forward, Executive Order 13148 calls for reductions in federal agency use of 15 toxic chemicals to be identified by a federal workgroup. Use reduction, as opposed to release reduction, reflects an emphasis on source reduction and pollution prevention. The list of chemicals will be developed by a federal workgroup and will reflect ongoing efforts to identify substitute chemicals or processes for specific applications to reduce environmental damage, risk, and liability. Also under the Executive Order, federal agencies will have to phase out the procurement of all Class I ozone-depleting substances by December 31, 2010.

The Executive Order also:

 Requires environmental strategies to be in place in all federal agencies and encourages all agencies to incorporate their environmental leadership goals into the annual government-wide plans

- developed under the Government Performance and Results Act of 1993.
- Requires agencies to conduct a selfassessment using an accepted environmental management system (EMS) framework, and requires that an EMS be implemented at all appropriate facilities by the end of 2005.
- Requires each agency to have in place a process for auditing its facilities for compliance with environmental regulations.

### Other Orders Signed

Two other Executive Orders were signed on April 21, 2000:

- "Greening the Government Through Federal Fleet and Transportation Efficiency" is aimed at improving fleet fuel efficiency and the use of alternative fuel vehicles (AFVs) and alternative fuels in the federal government. Each agency is required to reduce its entire vehicle fleet's annual petroleum consumption by at least 20 percent by the end of FY 2005, compared with FY 1999 petroleum consumption levels. Agencies have flexibility in determining how to accomplish this. Agencies must also reduce emissions of greenhouse gases that cause global warming by as much as 120,000 tons per year. (E.O. 13149, 65 FR 24595, April 26, 2000)
- "Federal Workforce Transportation" is aimed at encouraging use of mass transit and carpooling among federal workers. The Executive Order will allow federal workers to spend up to \$65 pre-tax dollars per month on public transit. In the Washington metropolitan area, all federal agencies will be required to help subsidize public transportation costs for their workers. And three agencies — the Departments of Energy and Transportation and EPA — will offer that benefit across the country. (E.O. 13150, 65 FR 24595, April 26, 2000)

For more information on the Executive Orders, contact Will Garvey at (202) 564-2458 or visit http://www.whitehouse.gov.

# ReportsandPolicies

### **Final Audit Policy Issued**

EPA issued its final Audit Policy on April 11, 2000 (65 FR 19617, "Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations"). The policy encourages regulated entities to voluntarily discover, promptly disclose, and expeditiously correct environmental violations. Among the incentives that EPA offers are elimination or substantial reduction of the gravity component of civil penalties, and a determination not to recommend criminal prosecution of the disclosing entity. The final policy also restates EPA's long-standing practice of not requesting copies of regulated entities' voluntary audit reports which might trigger federal enforcement investigations. Although substantially similar to the 1995 Audit Policy, the revisions lengthen the prompt disclosure period to 21 days, clarify that the independent discovery condition does not automatically preclude penalty mitigation for multi-facility entities, and clarify how the prompt disclosure and repeat violation conditions apply to newly acquired companies. The revised policy reflects EPA's experience over the past five years with implementing the policy, and was developed in close consultation with the U.S. Department of Justice, states, public interest groups, and the regulated community. For more information, contact Catherine Malinin Dunn at (202) 564-2629 or Leslie Jones at (202) 564-5123.

# Study Shows Similarities in RCRA Administrative Orders Violations

EPA recently conducted a thorough review of RCRA 3008a Administrative Orders (AOs) imposed on federal agencies from October 1992 through June 1999. The study showed clear similarities in the types of violations among federal agencies. A total of 247 individual violations were cited in

the final AOs. The majority of the violations fell into one of five broad categories:

- storage accumulation issues 19%;
- general operations and maintenance failures — 18%;
- manifest and transport problems 12%;
- labeling deficiencies 10%; and
- incomplete forms and documents 7%.

EPA issued 45 AOs during the study period and proposed fines in excess of \$10.6 million. A total of 43 AOs were finalized (two initial AOs were combined into one final order) and federal agencies actually paid over \$2.9 million in penalties and \$8.2 million for supplemental environmental projects (SEPs). The average fine posed against federal agencies was \$237,102 per order. Figure 1 depicts the number of RCRA AOs finalized by fiscal year.

The ten most frequent specific violations cited in the AOs were: incomplete or failure to make a hazardous waste determination; failure to label or improperly labeled containers; failure to indicate accumulation or storage start dates on containers; inadequate training or failure to train environmental staff; land disposal restriction (LDR) notification failure; failure to

close hazardous waste containers; incomplete contingency plans; failure to maintain or provide records; storage beyond permitted time limits; and storage of hazardous waste without interim status or permit.

Most violations found during this study were administrative and preventable. Facility managers must ensure that personnel are trained properly so that regulatory requirements are met during daily operations.

For more information, contact Kelly Jones at (202) 564-2459.

### Analysis Underway of Federal Facility Water Permit Violations

Study Shows Over a Third of Major Federal Facilities in Significant Noncompliance

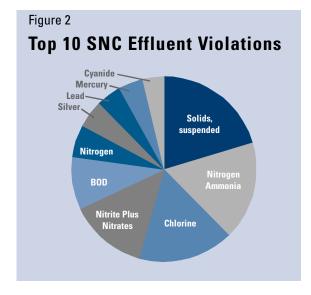
FFEO has completed a preliminary analysis of federal water permit violations. EPA and the states regulate approximately 500 federal facilities under the National Pollutant Discharge Elimination System (NPDES). The FFEO analysis covers only permittees that are considered "major" facilities that were in "significant noncompliance" (SNC) during at least one of eight quarters during the period January 1997 to December 1998.

Under the NPDES program, a facility may be classified as being in SNC if it has a violation of significant magnitude and/or duration to be among the Agency's priorities for review and/or response. An NPDES facility is classified as being in SNC for a given quarter if the facility is: (1) a major facility; (2) in operation; and 3)

RCRA AOs Finalized at Federal Facilities, Oct. 92-June 99

Number of AOs finalized=43

12
10
1993 1994 1995 1996 1997 1998 1999\*
Calendar year
\*Through June 1999



classified with a Noncompliance Status for one of the following: compliance schedule reporting; compliance schedule violation; effluent violations; non-monthly reported effluent violations; or nonreceipt of a Discharge Monitoring Report.

According to draft findings, 49 of 132 (37%) major federal permittees were in significant noncompliance at least once in the eight quarter study period. These 49 facilities accounted for a total of 128 quarters of significant noncompliance in four code categories:

- 43 quarters of effluent violations of monthly average limits (Code E);
- 41 quarters of late/nonsubmittal of Disharge Monitoring Reports (Code D);
- 38 quarters of effluent violations of non-monthly average limits (Code X);
   and
- 6 quarters of compliance schedule violations (Code S).

Eleven of the 49 (22%) facilities were in SNC status for four or more of the eight quarters.

The 49 facilities in SNC represented at least 680 effluent violations during the two-year period. (Some facilities had multiple SNC violations, such as compliance schedule violation and effluent violations.)

Some effluent violations are of such magnitude or duration that they trigger SNC status in and of themselves (Codes E and X). There were at least 199 of these effluent violations out of the 680 total violations (29%). The most commonly violated contaminant was suspended solids, which accounted for 33 of the 199 (17%) effluent violations. Figure 2 shows the top ten SNC effluent violations by number of occurrences.

For more information, contact Kelly Jones at (202) 564-2459.

#### **DIRECTOR'S WORD**

Continued from page 1

ment and targeting; (2) promoting environmental management systems; and (3) strengthening relationships with states and media programs. Let me review each of these in turn.

# Improving Data Management and Targeting

As OECA seeks to improve its data systems — working with states to ensure compliance with reporting requirements and developing new tools to promote user friendliness - FFEO must take full advantage of these information systems. Becoming proficient in the use of these systems will enable us to retrieve pertinent information in a timely fashion and to monitor compliance more effectively. Better compliance monitoring will help us identify the most serious compliance problems and take appropriate responses to ensure compliance (i.e., compliance assistance or enforcement). Last year, we began to develop scientific targeting packages for the regions. We will be working to expand these targeting packages to look for trends, identify focus areas, and develop profiles of specific federal facility industry sectors.

# Promoting Environmental Management Systems

Over the past few years, FFEO has been laying the groundwork for Environmental Management Systems (EMSs) by implementing and promoting the Code of Environmental Management Principles (ISO14000) and conducting Environmental Management Reviews (EMRs) at federal facilities across the country. During the course of the EMR pilot, we discovered that at facilities where EMRs were conducted, the personnel acknowledge their environmental responsibilities and show evidence of sincerely wanting to protect the environment. By building on this success and with the help of future Presidential directives in this area, I hope to encourage a greater commitment from other federal agencies to implement EMSs within their departments, agencies, and facilities. We believe that having a sound EMS in place in each federal facility will raise environmental performance and compliance across the federal government.

# Strengthening Relationships with States and Media Programs

EPA's co-regulators — state and local governments — are a huge resource

with whom we must strengthen our working relationships and support one another's efforts to ensure environmental compliance with the law. As a priority, FFEO will be looking very closely at how we communicate with other government offices in compliance and enforcement activities. At the same time, FFEO must work closely with EPA media program offices, ensuring that as future priorities are developed within those offices, federal agencies are recognized as an important part of the regulated universe. Our ability to work together is critical to FFEO's continued success in assisting agencies with their compliance issues.

I look forward to taking on these new challenges and to developing new and creative solutions to ensure environmental compliance at federal facilities. Our goal remains, as Steve Herman, Assistant Administrator for Enforcement and Compliance Assurance, has noted, "to help build the capacity of federal facilities to move toward cleaner, cheaper, and smarter methods of environmental management and compliance."

## News

### Environmental Appeals Board Rules Against EPA in Kingsville Lead-Based Paint Case

On March 17, 2000, the EPA Environmental Appeals Board (EAB) issued a final order in The U.S. Department of Navy, Kingsville Naval Air Station, Docket No. TSCA VI-736C(L). The case was on Interlocutory Appeal to the EAB based on a motion filed by the Kingsville Naval Air Station (Navy) in response to an order issued by Administrative Law Judge (ALJ) Stephen McGuire. The ALJ's Order had denied several motions to dismiss filed by the Navy and granted EPA's motions to strike. The Navy was named by EPA Region 6 as a respondent in a TSCA administrative penalty complaint filed in July 1998, for failing to comply with the Section 1018 Real Estate Notification and Disclosure Rule. Oral argument in the case was heard by the EAB on October 28, 1999.

One of the central issues on appeal was whether the Residency Occupancy Agreements (ROAs) which the Navy enters into with enlisted military personnel at Kingsville are "contracts to lease" under the Disclosure Rule. The terms "contract to lease" and "lease" were not defined by the Disclosure Rule. The Navy argued, among other things, that it does not enter into "contracts to lease" with military personnel and thus the Disclosure Rule is inapplicable. ALJ McGuire ruled that the ROAs were "contracts to lease" under the Disclosure Rule, and based his analysis on Texas contract and property law, which is where the Navy housing in question is located.

The EAB held that ALJ McGuire's "Order cannot be upheld based upon the Presiding Officer's analysis, which relied on Texas law." The EAB observed that there is no definition for "contract to

lease" in the rule, and stated that "it is not clear that an ROA would necessarily be included or excluded from any so-called ordinary definition of the term lease." The EAB further stated that "while the Board does have the authority, as the Agency's final decision maker in this case to fashion through this adjudicative proceeding a legally binding interpretation of the terms 'lease' and 'contract to lease' . . . we decline to exercise that authority here."

The EAB stated that "if the Agency intends to regulate ROAs under the Disclosure Rule, it needs to develop a workable and supportable interpretation of the Disclosure Rule to that end, and as appropriate amend the Disclosure Rule to reflect that interpretation." The EAB specifically did not rule on whether Section 408 of TSCA provides the requisite "express statement" of Congressional intent that EPA has administrative penalty authority over another federal agency.

The EAB concluded by noting DoD's memo of February 18, 1997 to the military services that states that occupancy of DoD housing by military members and their families is considered to be leasing of housing with regard to the Disclosure Rule. Given the serious and unquestioned health effects of lead-based paint, the EAB stated that it expected the Navy to comply with the disclosure requirements as contemplated by the February 1997 DoD Memorandum. For more information, contact Andrew Cherry at (202) 564-2589.

# Calculating the Economic Benefit of Noncompliance

On September 30, 1999, OECA issued guidance on calculating the economic benefit of federal agency noncompliance. The guidance reinforces existing EPA policy on including the economic benefit

(BEN) or cost savings associated with noncompliance when calculating penalties against federal violators. The purpose of the guidance is to encourage consistent application of EPA's policies on penalty calculation in order to treat all regulated entities in an equitable manner. EPA calculates BEN when it imposes penalties against private companies as well as other not-for-profit entities, including state and local governments. There is no reason to treat federal agencies differently when noncompliance occurs at their facilities.

The guidance explains the importance of including the cost savings in the penalty calculation and provides several examples. The BEN/cost savings component recaptures the costs saved by the violating facility and also provides incentives for an expeditious return to compliance. The BEN component factors in the length of time a facility is out of compliance and thereby provides another incentive for a facility to return to compliance as quickly as possible. If cost savings are not factored into the penalty, it is possible that a violator may find it pays to wait and comply only when caught.

Another consideration is that federal facilities often compete with private companies. For example, the Federal Bureau of Prisons manages federal prisons. But there are privately owned prisons as well, under contract to perform the same function. It is not uncommon for federal installations to contract with a private party to provide environmental services, such as managing hazardous waste onsite or running a sewage treatment plant. If a federal entity does not comply with all requirements, it can save money on its environmental budget. This could provide an unfair competitive advantage over a private party performing those same functions which is in compliance.

Penalties serve the purpose of deterring noncompliance with environmental requirements. Imposition of a substantial penalty against those who fail to comply

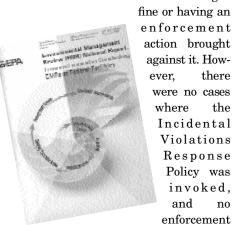
Continued on page 14



# EMR National Report Outlines Lessons Learned

A new report issued by EPA's Office of Enforcement and Compliance Assurance reviews the lessons learned in conducting 29 environmental management reviews (EMRs) at 20 federal agencies between 1996 and 1998. Among the key lessons are the following:

 Some facilities were worried that by voluntarily allowing an EPA representative on-site, the facility would increase the likelihood of incurring a



actions, fines, or penalties were issued during the pilot program.

- Partial EMRs had difficulty staying within the defined EMR scope, because of the overlap among the seven disciplines that make up an EMR. Team members should be flexible and willing to alter the scope of the review if all parties agree.
- Ample preparation time at least two months prior to the on-site visit is critical. Pre-site visits with site representatives are helpful in gathering the necessary information and in allaying anxieties. To avoid surprises, give personnel plenty of information about the EMR process, and inform them of any changes in team participants with

### **Upcoming EMRs in Region 6**

EPA Region 6's Federal Facilities Program has scheduled four EMRs at federal facilities this spring. The facilities which have agreed to these voluntary environmental reviews are the FDA's National Center for Toxicological Research in Jefferson, Arkansas; USDA/Agricultural Research Service, Southern Plains Area Office, in College Station, Texas; USDA's Kerrville Laboratory in Kerrville, Texas; and the Treasury Department's Bureau of Engraving and Printing, Western Currency Facility, in Fort Worth, Texas. For more information, contact Joyce Stubblefield at (214) 665-6430.

- enough time to cancel or postpone the review.
- Post-EMR evaluations help build a better EMR program. Encourage facilities to incorporate their thoughts on the value of the EMR into the sixmonth facility report submitted to EPA, or in other formats.
- Use neutral on-site escorts rather than the environmental manager of the facility as a way of facilitating candid discussions among personnel.
- Combine management and technical expertise in an EMR team for best results. Although the EMR focuses on management activities, technical environmental questions often arise during the course of a site visit.

Comments and feedback received on the pilot program have led to a number of changes in the EMR program, some of which reduce the number of reports and signatures required of participants, and others which relate to the handling of violations discovered during the course of an EMR. To allay facility concerns that voluntarily allowing EPA on-site could subject them to subsequent inspections, EPA added a provision stating that EPA gen-

There were no cases where
the Incidental Violations
Response Policy was
invoked, and no enforcement
actions, fines, or penalties
were issued during the pilot
program.

erally will not conduct inspections at the facility receiving the review for six months afterwards. On the other hand, facilities now have only 10 days, rather than 30, to voluntarily disclose violations incidentally discovered during an EMR.

Copies of the report, Environmental Management Review (EMR) National Report: Lessons Learned in Conducting EMRs at Federal Facilities (EPA 315-R-99-003, November 1999) can be downloaded from FFEO's website at http://es.epa.gov/oeca/fedfac/fflex.html.



### Region 4

U.S. Army Fort Bragg, North Carolina: On March 14, 2000, Region 4 issued a Complaint and Notice and Opportunity for Hearing against the U.S. Army Fort Bragg, North Carolina, for violations of SDWA. The Complaint alleges violations at Fort Bragg's drinking water plant, which serves 65,000 people, and seeks penalties in an amount not to exceed \$25,000 per day per violation. The SDWA compliance issues, which include multiple violations of the maximum concentration level (MCL) for total trihalomethane (TTHM) since 1993, were addressed by a March 25, 1999 Administrative Order that sought to return the system to compliance.

At an April 1999 meeting, Fort Bragg assured the Region that all necessary steps were being taken to return to compliance. However, Fort Bragg again experienced TTHM MCL exceedences in October 1999 and January 2000, and will likely be out of compliance for at least two more monitoring periods in 2000. A October 1999 internal audit by the Army revealed significant operation and maintenance problems, and called into question Fort Bragg's efforts to comply with the March 1999 compliance order.

The allegations against Fort Bragg stem from an April 1998 multi-media inspection and follow-up investigation. As a result of the inspection, numerous public water system violations were identified, as follows: 14 TTHM MCL violations; a TTHM monitoring and reporting violation for the quarter of October - December 1998; public education violations for failing to properly perform education required when lead action levels were exceeded; public notification violations because of the system's failure to provide adequate and timely public notification of its violations; and failing to report violations to the state within 48 hours. For

more information, contact: David Levenstein at (202) 564-2591 or Lisa Uhl, Region 4 at (404) 562-9789.

U.S. Department of Justice, Bureau of **Prisons:** In September 1999, Region 4 settled enforcement actions over Clean Air Act violations with the Federal Bureau of Prisons, Federal Correctional Institution, and the Federal Medical Center, located in Butner, North Carolina. The Consent Agreements and Consent Orders settled complaints over violations of New Source Performance Standards and the North Carolina State Implementation Plan. The respondent agreed to payment of a civil penalties of \$38,500 (for the Butner Correctional Institution) and \$21,200 (for the Federal Medical Center at the prison). In addition, supplemental environmental projects (SEPs) worth \$470,000 will be performed

The SEPs involve installation of a compressed natural gas (CNG) pumping station and replacement of 35 gasoline-powered vehicles with 35 vehicles that use CNG. In addition to reducing emissions which impact air quality, this SEP will serve as a pilot for other Bureau of Prisons Institutions to encourage use of CNG-fueled vehicles. The approximate cost of the SEPs is \$275,000 for the CNG pumping station and \$195,000 for the CNG powered vehicles. For more information, contact David Levenstein at (202) 564-2591 or Michiko Kono, Region 4 at (404) 562-9558.

U.S. Army, Fort Campbell, Kentucky/Tennessee: On September 29, 1999, a Consent Agreement and Final Order (CAFO) was filed settling a RCRA Section 3008(a) complaint against DoD's Defense Reutilization and Marketing Office in Fort Campbell, KY/TN. The settlement consisted of a cash penalty of \$125,000 and a SEP which includes an initial cost of \$366,000 and annual costs of \$165,700 for three years. Under the

SEP, Fort Campbell will replace a RCRA hazardous solvent used in 300 parts washers at the base with a new system that uses a non-hazardous solvent. This will eliminate a hazardous waste stream of approximately 557,500 pounds per year.

The CAFO also requires Fort Campbell to: certify that the security violations alleged in the complaint have been corrected; certify that its open burning/open detonation (OB/OD) unit is no longer in operation; submit a plan describing how compliance with training requirements is being achieved; and submit a plan for ensuring that modifications to solid waste management units are not made without prior notification of EPA or the state.

This settlement resolves a 1998 complaint against Fort Campbell for violations of several significant requirements of interim status for its OB/OD unit and RCRA permit conditions. Specifically, Fort Campbell exceeded its Part A Permit Application limits, violated inspection requirements, violated security requirements, failed to provide personnel training, and failed to provide notification of planned alterations to a permitted facility. For more information, contact David Levenstein at (202) 564-2591 or Kris Lippert, Region 4 at (404) 562-8605.

North Carolina Federal Recreation Facilities: In September 1999, EPA Region 4 took enforcement actions under SDWA against seven drinking water systems at Federal Recreation Facilities in North Carolina. SDWA 1414(g) administrative orders were taken against small "transient non-community water systems" located on property owned by the USDA Forest Service, the National Park Service, and the U.S. Army Corps of Engineers, for failure to conduct required monitoring for nitrites and failure to provide notification of violations to the state and public as required. The names and locations of the transient water systems are as follows:

USDA Forest Service, Cliffside Lake Recreation Area Water System

USDA Forest Service, Sunburst Campground Water System

USDA Forest Service, Cheoah Point Recreation Area Water System

USDA Forest Service, Arrowhead Campground Water System

National Park Service, Gillespie Gap Maintenance Water System

Price Park Campground Water System U.S. Corps of Engineers, Wilkes Skyline Marina, Wilkesboro NC

EPA's orders required that proper testing be completed and notifications provided as required by SDWA. High levels of nitrites in drinking water can be dangerous, especially for babies. For more information, contact David Levenstein at (202) 564-2591 or Lisa Uhl, Region 4 at (404) 562-9789.

### **Region 6**

#### U.S. Naval Air Station, Corpus Christi:

A CAFO was issued under Section 113 of the Clean Air Act to the U.S. Naval Air Station in Corpus Christi, Texas on February 11, 2000. The Naval Air Station agreed to seek Congressional authorization to pay a civil penalty of \$5,000. This CAFO resolves an administrative complaint which EPA issued to the Navy on September 30, 1998 addressing violations of the Texas State Implementation Plan (SIP) discovered during a multimedia inspection conducted in July 1997. The Naval Air Station had failed to properly operate emission control measures required by the Texas SIP in a spray paint booth in one of its hangars. The Navy also had failed to maintain the required minimum face velocity (air flow) at the intake opening of the paint booth. For more information, contact Carlos Zequeira at (214) 665-8053 or Raymond Magyar at (214)665-7288.

Bureau of Engraving and Printing, Western Currency Facility: On January 18, 2000, EPA Region 6 issued a CAFO to the Bureau of Engraving and Printing, Western Currency Facility in Fort Worth, Texas to pay a \$14,000 civil penalty, as well as perform a Supplemental Environmental Project involving at least \$231,000 worth of environmental improvements beyond those required by law. The Bureau was assessed this fine due to violations of the Texas State Implementation Plan, New Source Performance Standards, and the National Emission Standards for Hazardous Air Pollutants. For more information, contact Toni J. Allen at (214) 665-7271.

Federal Facilities and Voda Petroleum: In June 1999, EPA entered into a de minimis settlement under section 122(g) of CERCLA in connection with the Voda Petroleum, Inc. site in Clarksville City, Texas. Voda Petroleum is a former fuels blending and waste oil facility that was used by many North Texas area facilities. A 1994 site assessment revealed that some of the containerized waste drums had high levels of volatile organic compounds including benzene, toluene, and naphthalene, and high lead concentrations. In addition, some drums contained corrosive materials with a pH less than 1.

EPA's CERCLA response costs totaled \$804,260. Federal facilities that have been linked with Voda through the arranged transport, disposal, or treatment of hazardous substances include the U.S. Army's Defense Reutilization & Marketing Service in Fort Polk, LA; Kelly Air Force Base in San Antonio, TX; and Richards-Gebaur Air Force Base Kansas City, MO. These installations, along with other small contributors of hazardous substances to the Voda site, agreed to pay settlement amounts based upon the volume of material they sent to the Voda site. The 116 de minimis party payments to EPA total \$62,203. EPA will seek to recover its remaining CERCLA costs from non-de minimis parties. For more information, contact Michael Bodyston at (214) 665-7376.

### **Region 10**

**Puget Sound Naval Shipyard:** On February 17, 2000, the Puget Sound Naval Shipyard (PSNS) in Bremerton, Washington, entered into a compliance agreement with EPA to address a chronic problem of copper discharges into Puget

Sound's Sinclair Inlet, beyond what is allowed under its water discharge permit. The compliance agreement outlines the steps the Navy will take to meet the conditions of its permit and remain in compliance.

As the largest naval shipyard on the west coast, PSNS is allowed to discharge wastewater directly into Sinclair Inlet, but only if it meets the EPA-specified permit conditions. Discharge monitoring reports from 1997 to 1999 show that the amount of copper released from PSNS frequently exceeded the permitted levels. Some of the copper in the wastewater comes from dryblasting paint from naval vessels.

According to LeRoy Loiselle, manager of EPA's water compliance unit in Seattle, the Navy has already taken some steps to address the copper discharges, but more needs to be done. "It's a matter of fairness and doing the right thing," Loiselle said. "Private businesses spend hard-earned money to comply with their permits. The Navy has the same responsibility to keep local waters clean and must take the steps necessary to do so. This agreement shows that they are serious about their environmental responsibilities."

Under the compliance agreement, the Navy will develop and implement procedures for reducing the amount of copper discharges into Sinclair Inlet, including conducting dry-blasting within contained enclosures and operating a collection and treatment system for the wastewater from the dry docks.

For more information, contact LeRoy Loiselle at (206) 553-6901.

**DOE Hanford Operation:** On March 6, 2000, EPA Region 10 assessed stipulated penalties totaling \$55,000 against DOE for violations of the Tri-Party Agreement's CERCLA requirements at the Hanford site in southeast Washington State. The violations involved poor waste management practices at the 221-U uranium separation facility, one of five former chemical processing facilities in the 200 Area of Hanford. The penalty included \$50,000 for failure to have an approved Waste Control Plan prior to the generation of "investigation-derived" waste (this includes personal protective gear, sampling equipment, and other wastes created during a CER-

Continued on page 14

# Partnerships

### Partnering Meeting with International Shipbreaking

Opening a dialogue for the future, the first Ship Disposal Program (SDP) partnering meeting for International Shipbreaking Limited, L.L.C. was held at the Port of Brownsville in Brownsville, TX on January 28, 2000. Participants of the meeting included representatives of the company, EPA, OSHA, Department of Navy, Texas Department of Health, Texas Land Office, and National Environmental and Education Training Center (NEETC).

The meeting kicked off with welcoming remarks from Glen Clarks of Naval Sea Systems Command (NAVSEA), who outlined the purpose of the SDP pilot phase and the goals of the Partnering Meeting. Gary Rahl of Booz-Allen & Hamilton served as the meeting facilitator, discussing the elements of the SDP partnering process and the desired results of the meeting. Other speakers included representatives from International Shipbreaking, NEETC, the Puget Sound Naval Shipyard, and NAVSEA. The representatives stressed the following goals:

- 1. creating a cohesive partnership;
- building teaming relationships among various parties with responsibilities related to ship scrapping;
- developing goals for the SDP projects and partnering relationships; and
- 4. sharing lessons learned from the related experience in ship recycling.

The group also discussed pursuing a partnership with the OSHA, specifically by joining the OSHA Consortium. The next meeting is planned for July 2000 in Brownsville, Texas. For more information, contact Lou Roberts at (214) 665-7579 or roberts.lou@epa.gov.

# **Texas Pollution Prevention Partnership Meetings**



On December 10, 1999 and February 16, 2000, the Texas Pollution Prevention Partnership (P3) held meetings at Randolph Air

Force Base in San Antonio, TX and at Fort Bliss in El Paso, TX. The Partnership's goal is to bring together representatives from the Department of Defense, civilian federal agencies, and the State of Texas in a working relationship focused on promoting pollution prevention (P2) in Texas. The goals of the Partnership are to promote open dialogue, exchange P2 information, develop new activities, and integrate P2 into everyday activities throughout installations in Texas.

The Randolph AFB meeting centered around air issues. Presentation topics included the legal status of EPA's 1-hour and 8-hour standard ozone standards; the Texas CAA Strategy, which reviews the state implementation plans for various Texas cities; and specific Army, Navy, and NASA air issues and concerns.

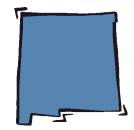
A wide variety of topics were discussed at the Fort Bliss AFB meeting, including the National P2 Partnership Crossfeed Forum held in Boston in March; the Green Base of the Future Project; and Environmental Management Reviews.

The next Texas P3 meeting was scheduled for May 4 at Camp Mabray, Austin, Texas. For more information, contact Joyce Stubblefield at (214) 665-6430 or visit the Texas P3 web site at http://www.afcee.brooks.af.mil/txp3.

# New Mexico P2 Partnership Meeting

A P2 Partnership Meeting was held January 19, 2000 in Albuquerque, NM at the TVI/Small Business Development Center, for the purpose of reviving the partnership originally created by the DoD and the New Mexico Environment Department (NMED), and expanding it to include DOE and NASA. The Partnership is co-chaired by Thom Rennie from the Region 6 Air

Force Center for Environmental Excellence and Jerry Bober of NMED's Green Zia Environmental Excellence Program.



Some of the items discussed at January's meeting included a DoD initiative on P2 and compliance, RCRA Waste Minimization Permit Requirements, and "Red Rags." Red Rags are the wipe-rags commonly used in base cleaning and maintenance operations. The rags are usually contaminated with grease, fuel, and other hazardous substances, and are sent to contracted laundries for cleaning or disposal, although the laundries may not be familiar with proper procedures for handling them

Another P2 Partnership meeting was scheduled for April 13, 2000 at the Kirtland Air Force Base, Albuquerque, NM. For more information, contact Jerry Bober at (505) 827-0173 or jerry\_bober@nmenv.state.nm.us.

# ConferenceUpdate

### Region 6 Wetlands Roundtable Forum

**EPA Region 6** hosted its third Wetlands Regulatory Roundtable in New Orleans, LA on February 2-3, 2000. In attendance were representatives from: U.S. Army Corps of Engineers District and Divisional Offices; U.S. Fish and Wildlife Service Field Offices; National Marine Fisheries Service; and Texas, Arkansas, and Louisiana state environmental offices, who have a role in reviewing wetland permits.

The primary objective of the two-day roundtable was to improve the effectiveness of the permitting program under Section 404 of the Clean Water Act. John Meagher, Director of the Wetlands Division in the EPA Office of Water, updated the group on a number of EPA regulatory activities designed to increase the quantity and quality of wetlands. He emphasized that the national goal is "no net loss of wetlands."

The roundtable continued with a status report on workgroups established at previous roundtables. Topics of discussion included: creation of a "stream team" to review stream restoration projects; consideration of a cumulative impact study

for St. Tammany Parish, Louisiana; enforcement issues; and mitigation banking. Presentations included data collected from completed mitigation sites, and the Charleston Method, a tool to determine compensatory mitigation for impacts to wetlands. Day two of the forum consisted of a discussion session with local environmental organizations, and updates from state and governmental agencies on new activities concerning wetlands in their areas.

For more information, contact Wanda Boyd at (214) 665-6696.

# EPA Region 2 Hosts Roundtable on Mercury Reduction and P2 in Federal Health Care Sector

On February 22, 2000, the Region 2 Federal Facilities Program, in conjunction with the Region 2 Solid Waste Management Team and Pollution Prevention Program, held the first Federal Facilities Roundtable on Mercury Reduction and Pollution Prevention in the Federal Health Care Sector. This event marked

the first Region 2 Federal Facilities Roundtable focusing on a single topic and the first EPA outreach effort under its Memorandum of Understanding (MOU) with the American Hospital Association.

More than 30 safety officers and industrial hygienists from various federal institutions learned about the goals of the 1998 MOU and how they could help achieve these goals. The MOU calls for virtual elimination of mercury by the year 2005, followed by a tiered goal to reduce overall hospital waste volume — 33% by 2005 and 50% by 2010 — through voluntary efforts.

Following a discussion of the MOU and hazardous and universal waste regulations, case studies were presented by representatives from the Albany and Beth Israel Medical Centers. The case studies demonstrated the advantage of instituting mercury and medical waste reduction practices which ultimately resulted in cost savings. The program continued with a discussion of mercury resources on the Internet and a presentation of two related voluntary programs instituted by EPA: WasteWise, which addresses the reduction of solid waste, and Energy Star, which addresses the efficient use of energy. Both the WasteWise and Energy Star programs contain components for recognizing facility successes, which EPA Region 2 plans to include in the mercury/hospital waste reduction initiative.

Attendance at the roundtable included representatives from the following federal agencies: Veterans Affairs, Army, Air Force, Federal Bureau of Prisons, Department of Agriculture, Public Health Service, General Services Administration, Federal Aviation Administration, and National Oceanic and Atmospheric Administration. Several attendees expressed interest in participating in a focus group to further explore waste reduction opportunities in the federal health care sector.

For information about the focus group, or to obtain information about mercury reduction, contact Lorraine Graves at (212) 637-4099.



# **Publications**

# Fleet Maintenance Pollution Prevention Materials Now Available From EPA Region 9

Every day fleet maintenance facilities use chemicals and generate wastes that are expensive to purchase and manage, and that create potential environmental and worker health problems. To avoid these problems, EPA Region 9's Pollution Prevention Program has developed a Pollution Prevention Toolkit: Best Environmental Practices For Fleet Maintenance. The toolkit is a set of ten fact sheets and an accompanying video demonstrating proven, cost-effective strategies for fleet

operations to reduce costs, reduce liability, and improve environmental performance and worker health and safety.

The toolkit is the result two years of research on the most up-to-date information on pollution prevention techniques and technologies for fleet maintenance operations. The information was developed through consultation with a national advisory panel made up of shop professionals and pollution prevention experts, a national literature review of relevant materials, and more than 25 in-shop demonstration projects.

The fact sheets provide up-to-date, practical information on implementing these pollution prevention best practices:

- aqueous parts washing;
- aqueous brake washing;

- oil life extension;
- · reusable oil filters;
- refillable spray bottles;
- antifreeze recycling;
- · spill prevention and floor cleanup; and
- oil water separators.

Each fact sheet contains an overview of the best practice; tips on making it work on the shop floor; information on capital, operation, and maintenance costs; and case studies from fleet operations. The accompanying video, *Profit Through Prevention: Best Environmental Practices for Fleet Maintenance*, shows how shops are reducing waste and saving money by implementing these best practices. The video was developed in conjunction with the Partnership for Environmental Technology Education, a recognized leader in environmental training for fleet maintenance personnel.

To order the *Pollution Prevention Toolkit*, call 1-800-490-9198 and ask for publication number *EPA-909-E-99-002*. For the video, ask for publication number *EPA-V-99-002*. More information is available at the EPA Region 9 Pollution Prevention website: www.epa.gov/region09/p2/autofleet. For more information, contact John Katz at (415) 744- 2150.

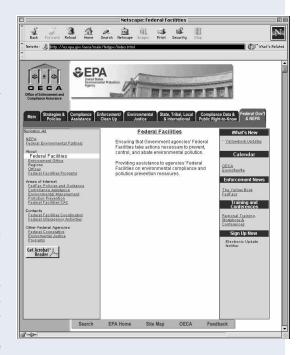
### **Region 6 Publications**

The EPA Region 6 FY99 Federal Facilities Compliance Status Report, issued in February 2000, provides regulatory compliance (inspection and enforcement) and related information (base closure, Superfund) on Region 6 federal facilities. This report serves as a communication tool that can be used by all parties including facilities, EPA, and the states. As with any report, EPA recognizes that the information represents a snapshot in time and is subject to discrepancies. Facilities

### **Online Update:**

### New OECA Website Look

The Office of Enforcement and Compliance Assurance (OECA) website has a fresh, new look. Visit us at www.epa.gov/oeca. Working closely with the Office of Environmental Information, OECA is redesigning its website to make it more user-friendly, emphasizing a topical organization of material, and making site navigation easier. The new home page features eight tabs at the top of the page, one for each major OECA topic area, which link to pertinent sub-topics. As work on the OECA website continues, the next step will be



redesigning the individual office and regional websites.

Although the FFEO home page has the same URL (http://www.epa.gov/ oeca/fed-fac/fflex.html) as before, it is accessed via a different route. To access the FFEO home page, click on the Federal Government & NEPA tab, the last one at the top of the OECA home page. Then click on Federal Facilities.

wishing to report discrepancies are encouraged to contact EPA. For more information, please contact Joyce Stubblefield at (214) 665-6430.

EPA Region 6 Federal Facilities Program publishes "Did You Know?" — a monthly, non-technical fact sheet that communicates the methods, events, and ideas that EPA uses in investigating and resolving environmental issues. The fact sheet also provides contacts for experts in the field who are available to answer technical questions. Some of the topics covered recently include perchlorethylene, GIS tools, and underground storage tanks. The fact sheets are accessible on the Region 6 website at www.epa.gov/region06/6en/xp/enxp4b.htm.

For more information, contact James Colon at (214) 665-7457.

### **Guide for Ship Scrappers**

It's here! A Guide for Ship Scrappers - Tips for Regulatory Compliance. The 100-page guide, published by FFEO in May 2000, provides federal guidance and tips on environmental, health, and safety requirements for ship breaking and scrapping operations.

Not involved in ship scrapping? Well, you may find this guide of interest anyway. It describes removal and disposal information in plain language for seven processes:

- asbestos removal and disposal;
- sampling, removal, and disposal of polychlorinated biphenyls;
- bilge and ballast water removal;
- · oil and fuel removal and disposal;
- metal cutting and recycling;
- paint removal an disposal; and
- removal and disposal of miscellaneous ship machinery.



A Guide for Ship Scrappers can be obtained from EPA/NCEPI by calling (513) 489-8190, contacting FFEO at (202) 564-2461, or visiting the website at: www.epa.gov/oeca/fedfac/fflex.html.

# State of Federal Facilities Report

FFEO has released *The State of Federal Facilities: An Overview of Environmental Compliance at Federal Facilities, FY 1997-98.* The third in a series of such reports, the report provides a detailed breakdown of the number and category of the 14,400 federal facilities regulated under each of the major federal environmental statutes. Among the major find-

Among the major findings are a sharp increase in compliance for RCRA treatment, storage, and disposal facilities, and a sharp decline in compliance of federal facilities with wastewater regulations.

ings are a sharp increase in compliance among RCRA treatment, storage, and disposal facilities, and a sharp decline in compliance of federal facilities with wastewater regulations. Specifically:

- Compliance rates for federal RCRA treatment, storage, and disposal facilities (TSDFs) have increased steadily since FY 1993, from 55% to 88%. Federal facility TSDFs have slightly higher compliance rates than private TSDFs (88% vs. 83%).
- Compliance rates for federal facilities under the Clean Water Act NPDES program have declined steadily since FY 1993, from 94% to 62%.
- Compliance rates for federal facilities under the Clean Air Act have remained steady in the last five years (87% in 1993 compared to 89% in 1998).
- Compliance rates for federal facilities under the Safe Drinking Water Act and TSCA remain high (97-100%).
- In FY 1997-98, there were just over 2,600 inspections and about 750 enforcement actions conducted by EPA and the states at federal facilities under the RCRA, CAA, and NPDES programs.

A copy of the report is available for downloading from the FFEO website (http://es.epa.gov/oeca/fedfac/fflex.html). For more information, contact Greg Snyder at (202) 564-1271.

# Vice President Gore Highlights "Greening the Government" Achievements

In announcing the signing of new Executive Order spurring the federal government to a new level of environmental leadership, Vice President Gore also released a new report entitled, "Greening the Government: A Report to the President on Federal Leadership and Progress." The report highlights the progress federal agencies have made in response to six of President Clinton's previous "Greening the Government" Executive Orders.

Those orders have directed federal agencies to take concrete steps to conserve energy and natural resources, prevent pollution, reduce waste generation, eliminate usage of ozone depleting substances, purchase recycled, energy-efficient, and environmentally preferable products, and reduce usage of toxic substances.

Over the last seven years, federal agencies have made major changes and accomplishments in sustainable procurement, energy efficiency, and other greening practices, which demonstrate the significant impact and leadership of the federal government. The report highlights key accomplishments, including:

Over the last seven years, federal agencies have made major changes and accomplishments in sustainable procurement, energy efficiency, and other greening practices.



- Federal facilities have reported an almost 60 percent decrease in releases of toxic chemicals since 1994.
- Energy consumption in government buildings for FY99 decreased 20.5 percent since 1985, saving the taxpayer \$2.2 billion in energy costs.
- Federal agencies and government contractors have dramatically increased their purchasing of recycled content products from 5 to more than 50 since 1993.

"The federal government has made great strides over the last seven years in reducing impacts to the environment, but we can do more," Vice President Gore said. "Today, we are saying that the federal government is going to lead by example when it comes to pollution prevention."

The "Greening the Government" report can be viewed on the web at www.ofee.gov.

#### **NEWS**

Continued from page 6

in a timely manner is important in efforts to encourage compliance with the law and remove the cost savings associated with delayed compliance. Through the use of supplemental environmental projects (SEPs) in settlement agreements, EPA is often able to work with a facility to obtain substantial environmental benefits in lieu of part of a monetary penalty.

For more information, contact David Levenstein at (202) 564-2591.

#### THE HAMMER

Continued from page 9

CLA investigation), and a one-time penalty of \$5,000 for failure to sample the waste before its disposal.

Both penalties address violations of the sampling and analysis plan that was agreed upon under the Tri-Party Agreement. The waste was discovered September 16, 1999, during a Washington State Department of Ecology inspection of a 90day waste accumulation area. EPA is concerned that the violations indicate that DOE had an inadequate understanding of what wastes were generated by characterization activities at the former uranium separation facility.

Mike Gearheard, Director of EPA's Region 10 Superfund office, said, "The Tri-Party Agreement is very clear on DOE's responsibilities to follow careful waste management practices. Continued missteps at one of the country's most dangerous sites cannot and will not be tolerated."

EPA continues to investigate waste management at Hanford. For more information, contact Doug Sherwood at (509) 376-9529.

# Success Story:

# In-Situ Gaseous Reduction of Chromium

EPA Region 6 participated in a cooperative effort with DOE, the U.S. Army, and the New Mexico Environment Department's Hazardous and Radioactive Materials Bureau. A laboratory scale corrective measure study was performed indicating that reduction and immobilization of chromium in contaminated soils can potentially be achieved through treatment with a diluted hydrogen sulfide gas mixture. The primary chemical reaction involves the reduction of Cr(VI) to Cr(III) with the subsequent precipitation of nontoxic Cr(III)hydroxide and sulfate or sulfur.

Initial field testing of this approach has been completed at a Cr(VI)-contaminated site at White Sands Missile Range, New Mexico. The field test was conducted during the spring and summer of 1998 and involved the in-situ injection of low level (200 ppm) hydrogen sulfide diluted in air. The gas mixture was drawn through the waste site by a vacuum applied at extraction boreholes located at the site boundary during the demonstration. Residual hydrogen sulfide was removed from the extracted gas stream before discharge to the air. Monitoring of the breakthrough of hydrogen sulfide was utilized as a basis for assessing treatment progress during the injection phase of the test. Continuous site monitoring was performed to assure that any releases of hydrogen sulfide could be identified. No detectable releases of hydrogen sulfide to the site atmosphere occurred during the test.

Comparison of Cr(VI) analyses of soil samples taken before and after the test indicated that 70% of the Cr(VI) mass originally present at the site was reduced by the approach. In particular, a shallower zone with the highest Cr(VI) concentration levels was nearly completely treated. However, a deeper zone of lower contamination was largely unaffected. It is concluded that the treatment gas mixture was preferentially channeled through the upper zone and bypassed the less permeable lower zone. Treatment of the lower zone could probably be accomplished, if necessary, by directing the injection of treatment gas into this zone. All Cr(VI) concentrations measured in post-test samples were well below the EPA Region 9 cleanup criteria of 30 mg/kg, however, thus indicating the viability of the technology as a remediation approach. Contacts: David Neleigh at (214) 665-6785, email: neleigh.david@epa.gov or James Harris at (214) 665-8302, email: harris.jamesa @epa.gov.

# **UpcomingEvents**

### June 20-22, 2000

# EPA Region 4/DoD/State 2000 Environmental Conference for Federal Facilities

Atlanta, GA

Theme: "Environmental Leadership in the New Millennium." Contact: Stacy Howard, (404) 562-9633 or howard.stacy@epa.gov.

#### October 2000

#### **Region 6 Pollution Prevention Conference**

Dallas, TX

Contact: Eli Martinez, EPA Region 6, (214) 665-2119.

### October 15-18, 2000

#### **Texas Recycling Summit**

Houston, TX

Contact: Joyce Stubblefield, EPA Region 6, (214) 665-6430, www.texasrecycling-summit.com.

### LIST OF ACRONYMS

AFB	Air Force Base
AO	Administrative Order
CAA	Clean Air Act

CAFO Consent Agreement and Final Order

CERCLA Comprehensive Environmental Response, Compensa-

tion, and Liability Act
DoD Department of Defense
DOE Department of Energy

EMR Environmental Management Review

EO Executive Order

EPA Environmental Protection Agency FFCA Federal Facilities Compliance Act

FFEO Federal Facilities Enforcement Office (EPA)

GIS Geographic Information System MOU Memorandum of Understanding

NASA National Aeronautics and Space Administration

NEPA National Environmental Policy Act

NPDES National Pollutant Discharge Elimination System OECA Office of Enforcement and Compliance Assurance

P2 Pollution Prevention

RCRA Resource Conservation and Recovery Act

SDWA Safe Drinking Water Act

SEP Supplemental Environmental Project
SFIP Sector Facility Indexing Project
SIP State Implementation Plan
SNC Significant Noncompliance
TRI Toxics Release Inventory
TSCA Toxic Substances Control Act

TSDF Treatment, Storage, and Disposal Facility

UST Underground Storage Tank

United States Environmental Protection Agency (2261A) Washington, DC 20460

Official Business Penalty for Private Use \$300

Address Service Requested